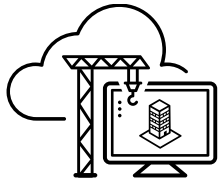


DIGITAL
CONSTRUCTION
SUMMER SCHOOL

Cloud based Learning





DIGITAL
CONSTRUCTION
SUMMER SCHOOL



Lennart Andersson

Adjunct Associate Professor Pratt Institute

- Construction Documents
- BIM for CM
- BIM for FM



PRATT AECO

Community Engagement

Cloud Based Learning for Community Collaboration

Key Goals

Enhance collaboration

Bring reality to the classroom

Stakeholder engagement for upfront feedback loops

Investigate temporary vs permanent construction

Operational understanding

Environmental Footprint

Participants

The Pratt logo consists of the word "Pratt" in white, bold, sans-serif font, centered within a solid yellow rectangular background.

Pratt



Marvel Architects

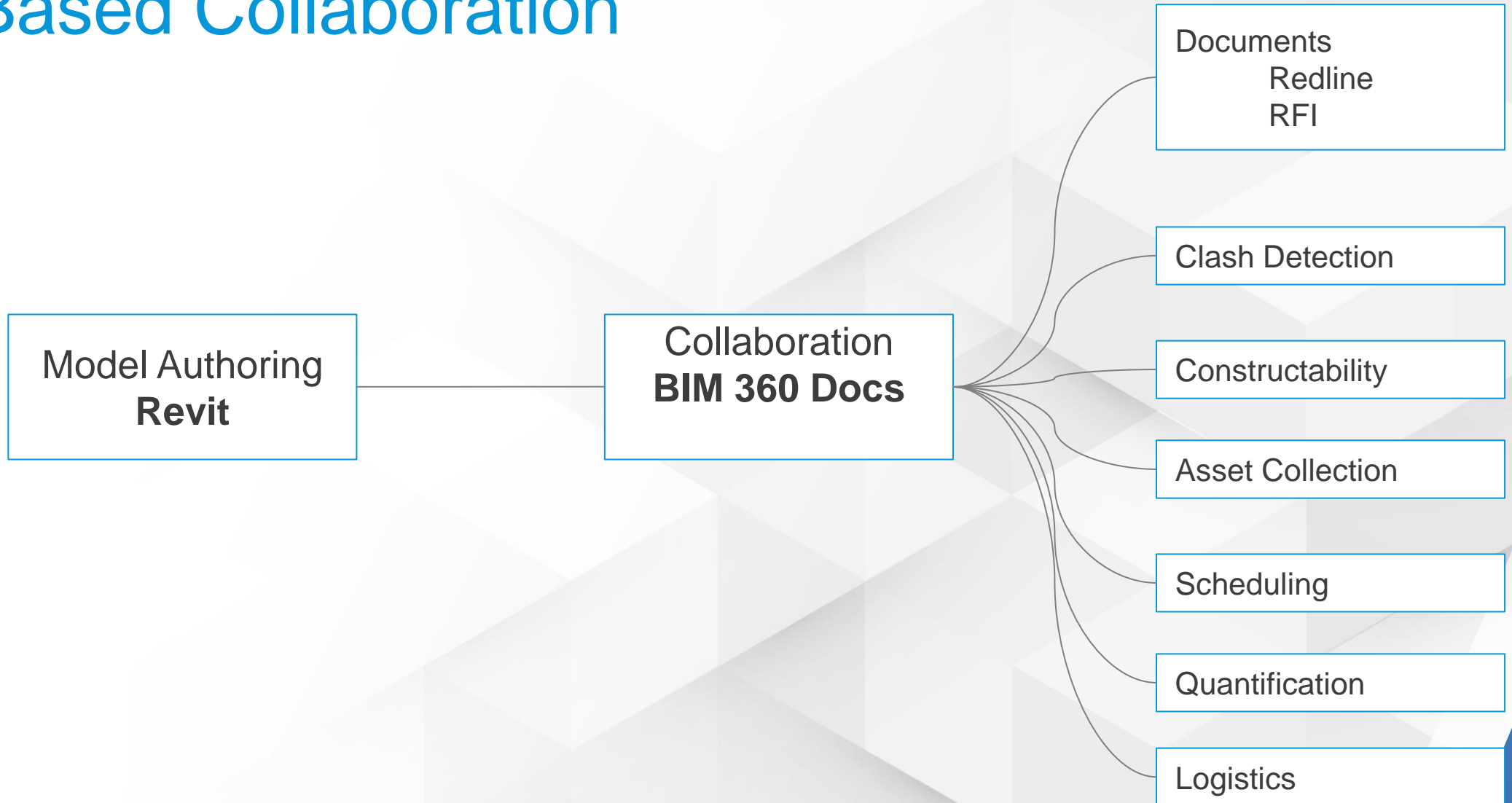
CM Undergraduate, FM Graduate

NY DDC - Town & Gown

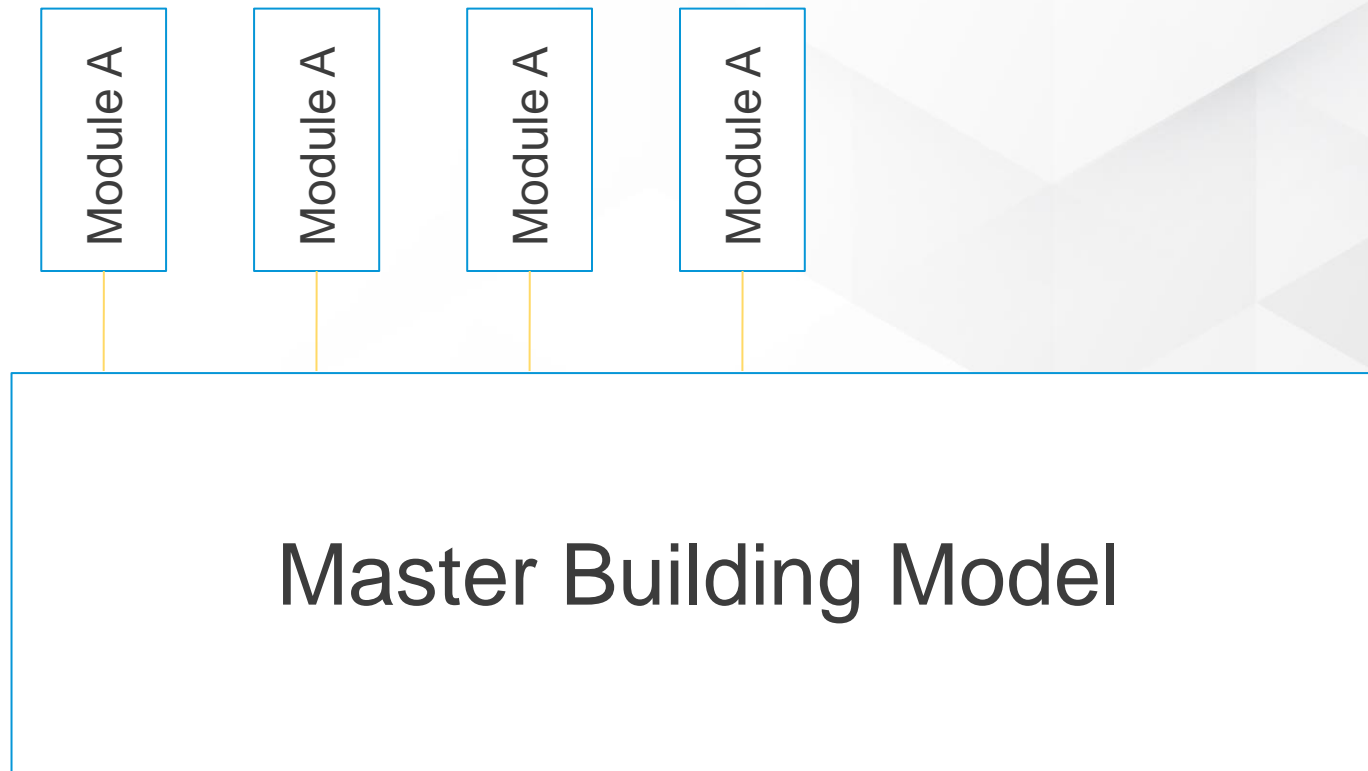
Mayor's office of homeless services

Marvel Architects

Cloud Based Collaboration



Revit file linkage



Projects exercises focus

Fall 2020

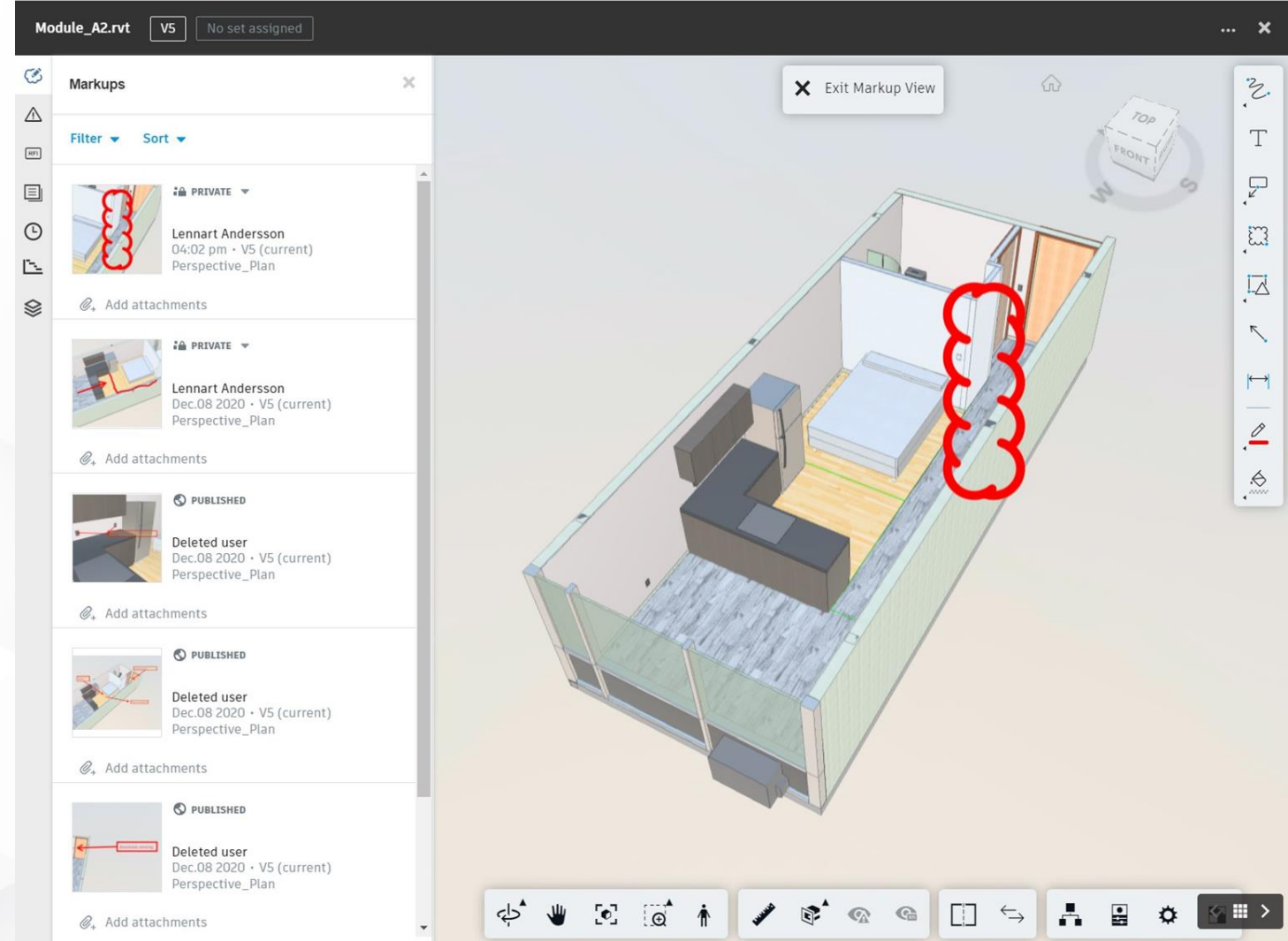
Construction Management phase

Spring 2021

Digital Campus – Campus as laboratory for AECO

Markups

Marking up, sharing and tracking



Issue Tracking

Assigning, tracking issues.

Module_A.rvt V19 No set assigned

Issues

Filter Sort

| | |
|------------------------------------|--------------|
| ANSWERED | Oct 8, 2020 |
| #12 - ceiling clash | |
| Assigned to: Lennart Andersson | |
| Location: Kitchen ceiling | |
| ANSWERED | Sep 29, 2020 |
| #11 - pipe sticking out of wall | |
| Assigned to: Lennart Andersson | |
| Location: Unspecified | |
| ANSWERED | Sep 30, 2020 |
| #10 - pipe | |
| Assigned to: Lennart Andersson | |
| Location: Unspecified | |
| OPEN | Oct 8, 2020 |
| #9 - Door Frame issue | |
| Assigned to: Deborah Gans | |
| Location: Unspecified | |
| ANSWERED | Oct 8, 2020 |
| #8 - Door Knob's Missing | |
| Assigned to: LennartTest Andersson | |
| Location: Unspecified | |
| ANSWERED | Oct 6, 2020 |
| #7 - F.F. HEIGHT DIFFERENCE | |

Create Issue

A 3D architectural rendering of a kitchen interior. The scene shows a kitchen with light green cabinetry, a dark countertop, and a wooden floor. A blue circle is placed on the floor near the entrance, and a yellow circle is placed on the wall near the ceiling. A compass rose in the top right corner indicates the orientation with labels for TOP, FRONT, RIGHT, and S. A toolbar on the right side contains various icons for navigation and editing.

Submittals

A document submitted by the contractor to be reviewed and approved by design consultant. The CM manages the distribution and tracking of the status.

AUTODESK BIM 360 | PRATT INSTITUTE BIM360 EDU-LA > Modular Housing

Project Management

Submittal Item #13-22 41 16

Submitted

The Manager needs to submit for review. [Submit to Reviewer](#)

[OVERVIEW](#) [DETAILS](#) [ATTACHMENTS](#) [ACTIVITY](#) [View all](#)

Details

| | |
|---|---|
| Assigned to Manager Former user | Spec section 22 41 16 - Plumbing Sink |
| Co-Reviewers Add co-reviewers | Priority Normal |
| Manager due date Unspecified | Package 22 41 16-001 Plumbing Sink |

Attachments for review

Drag and drop files here or [browse](#)

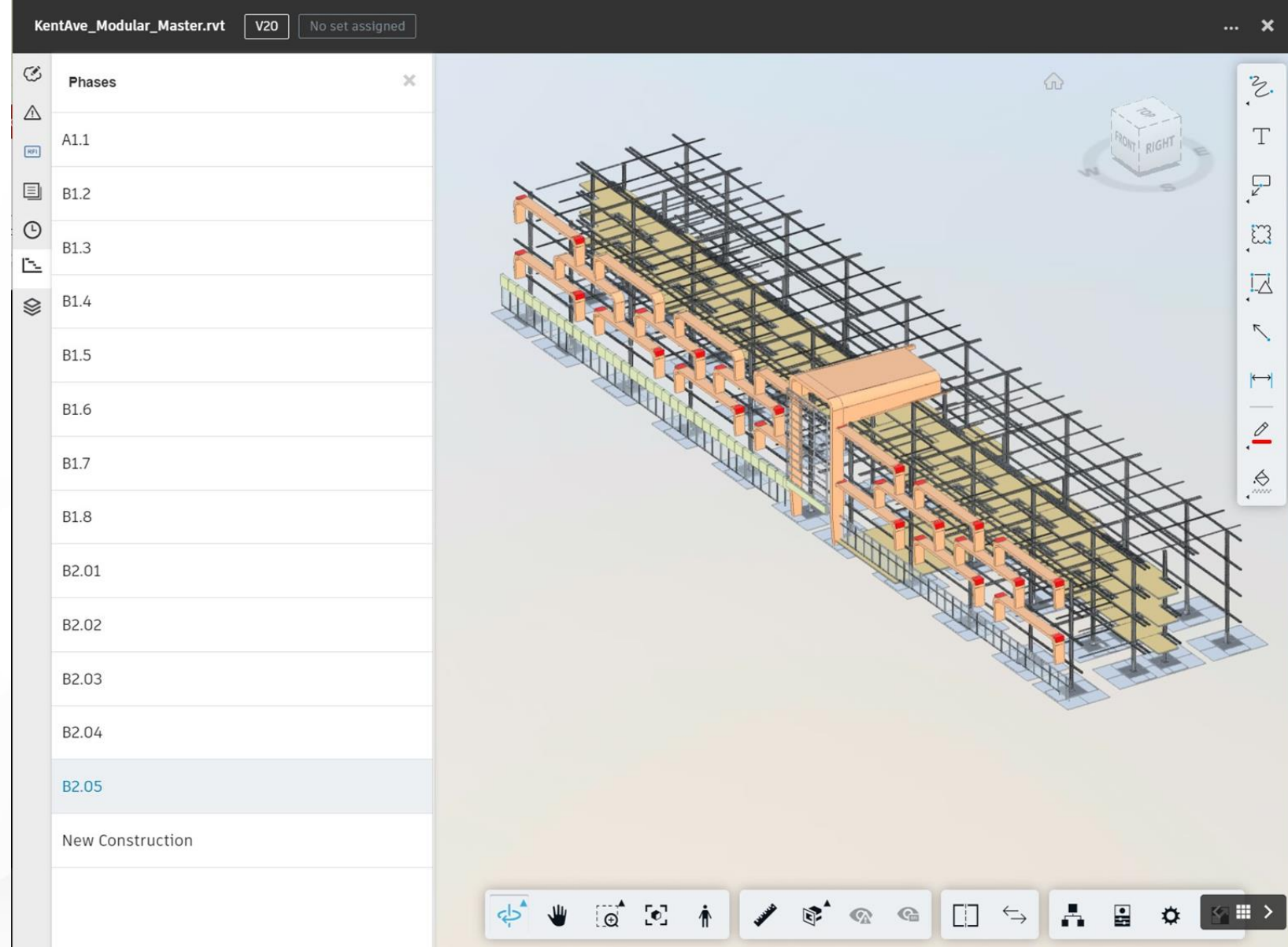
| Attachment | For review |
|--|---|
| K-2362-4_spec_US-CA_Kohler_en.pdf Former user · Oct 6, 2020 | <input checked="" type="checkbox"/> ... |

Showing 1 - 13 of 13

1 of 1

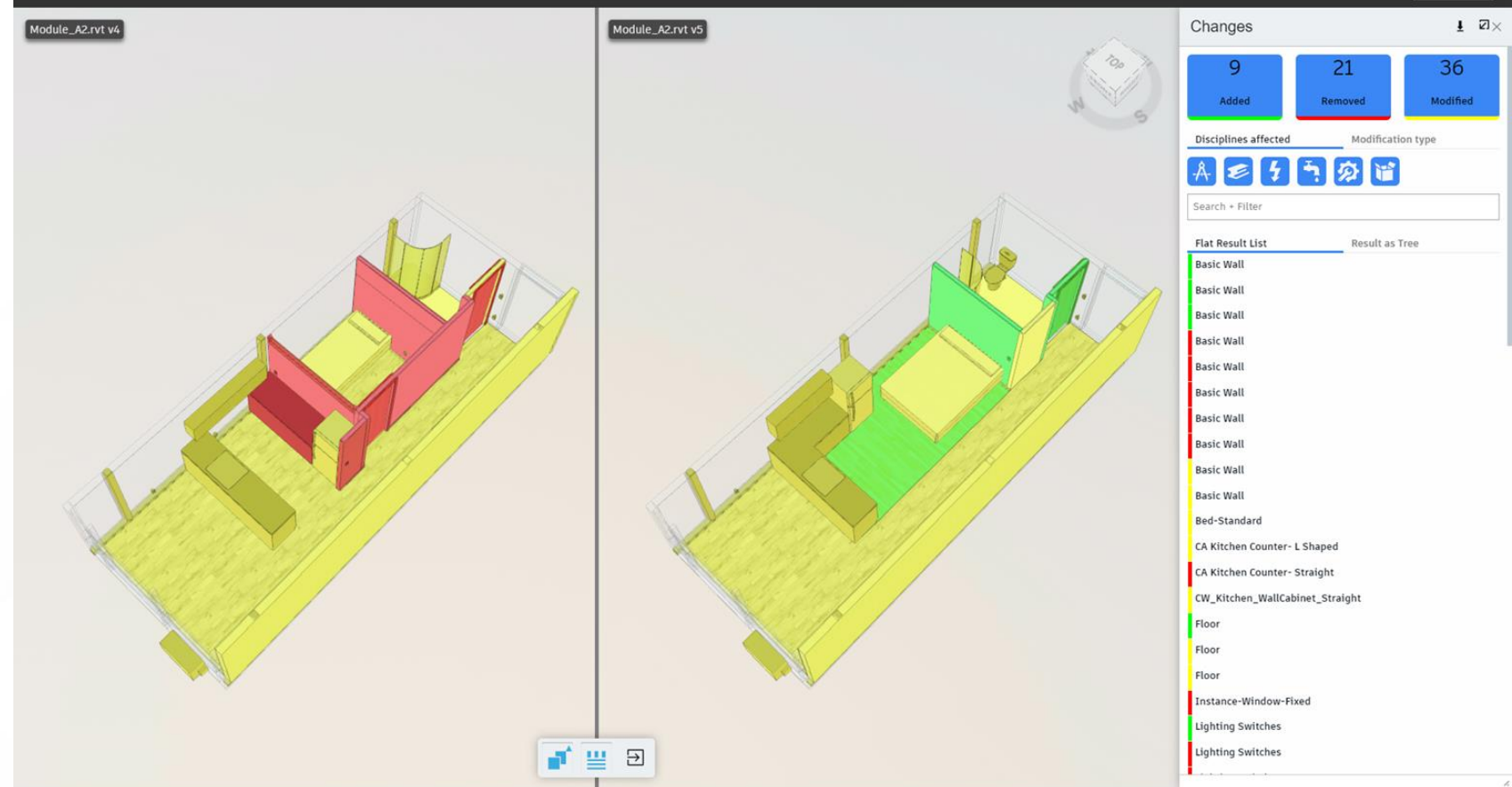
Phasing

Plan & Visualize phasing within the BIM 360 platform.

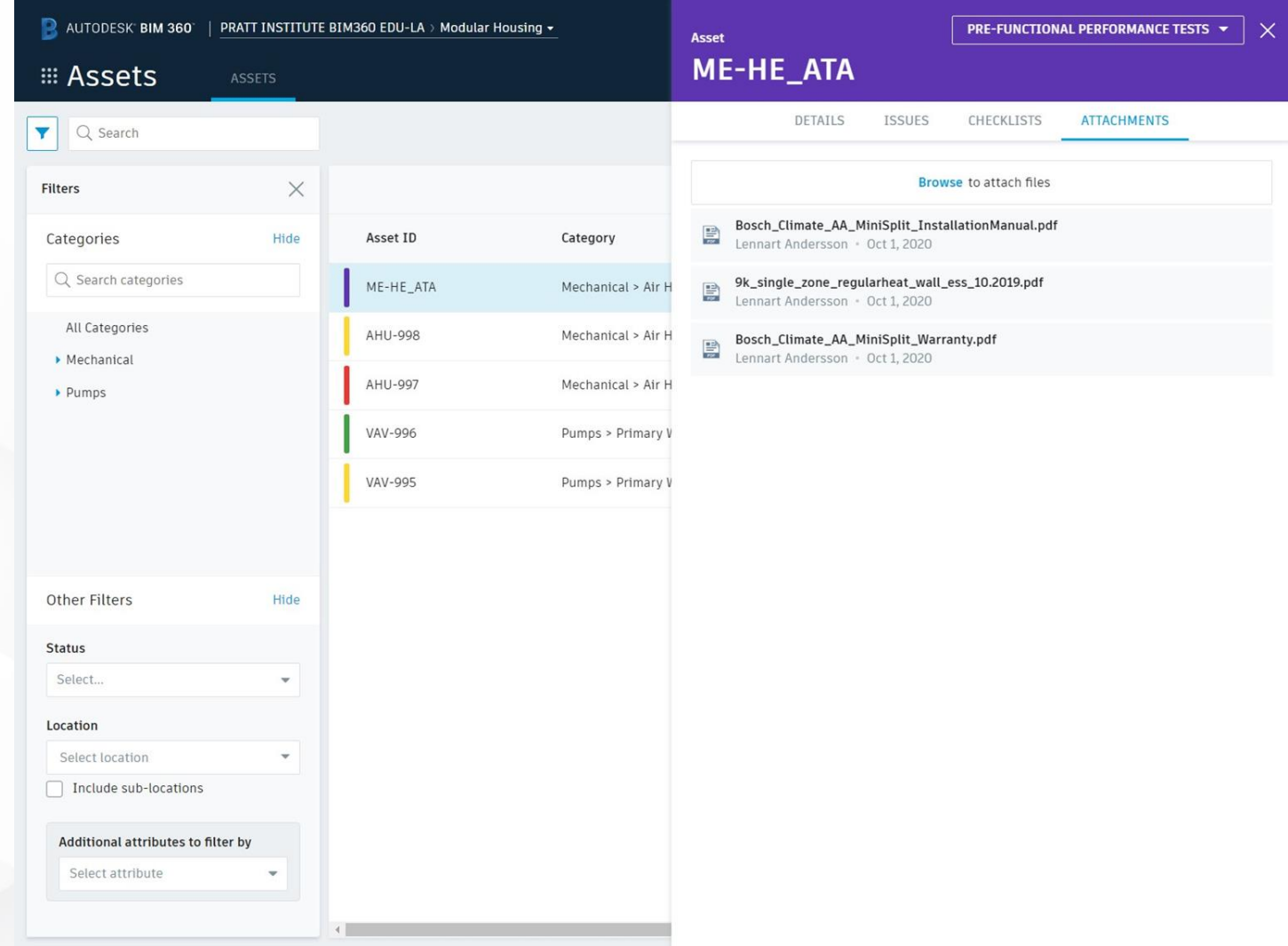


Changes

Automatic Visualization of changes from the different versions.



BIM driven Asset Register for seamless integration of supporting documentation for Facilities Management



Tools

- Launchpad
 - Revit
 - Naviswork
 - Recap
- BIM 360
 - Docs
 - Design
 - Build
 - Asset

Kent Avenue Site

Reality Captured Site



Kent Avenue Site

Minimal impact on site

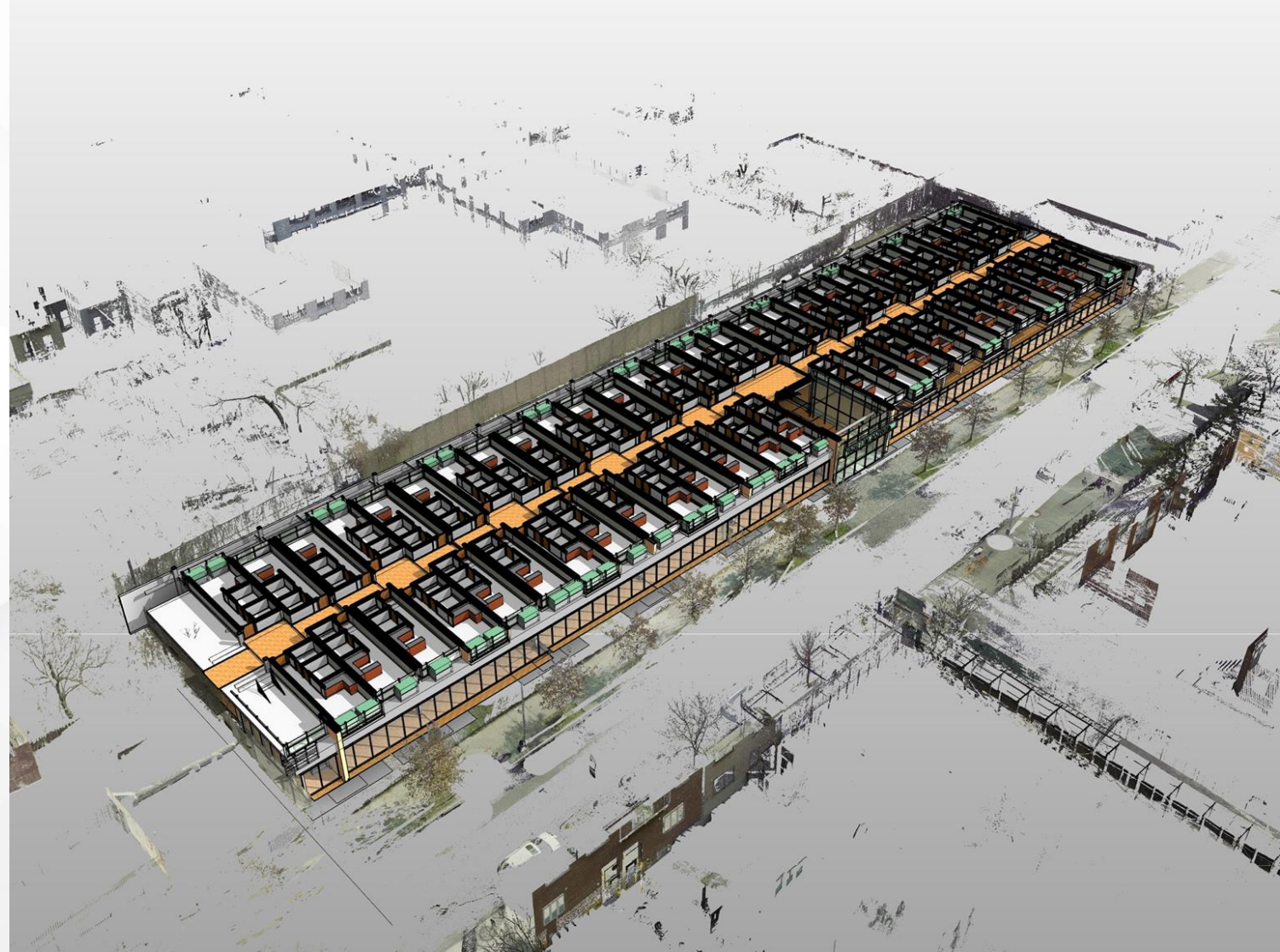
Kit of Parts

Assembly not construction



Kent Avenue Site

Modules

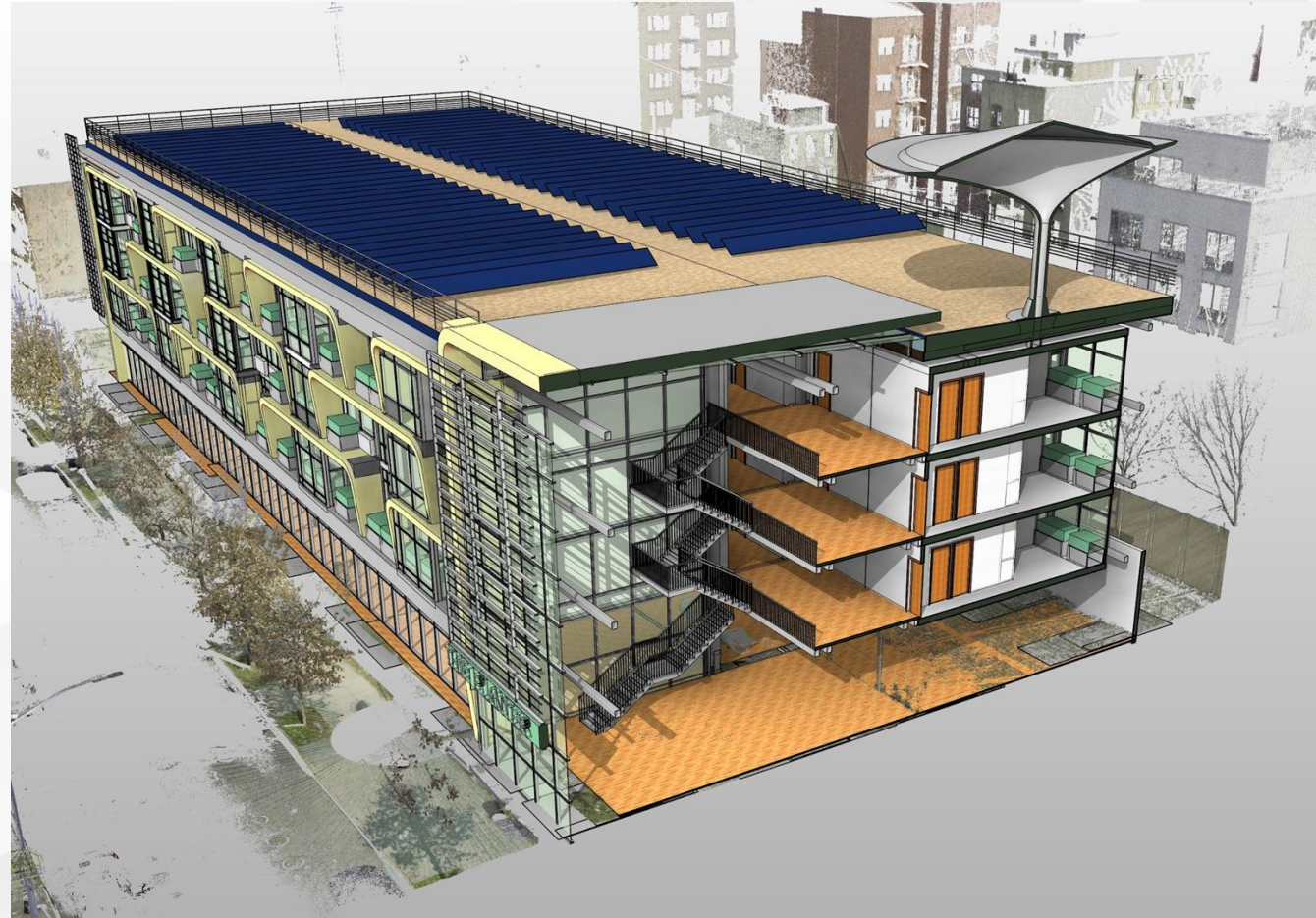


Sustainable Practices

Community Garden

Energy Generation

Biofilic Facades



Exercises

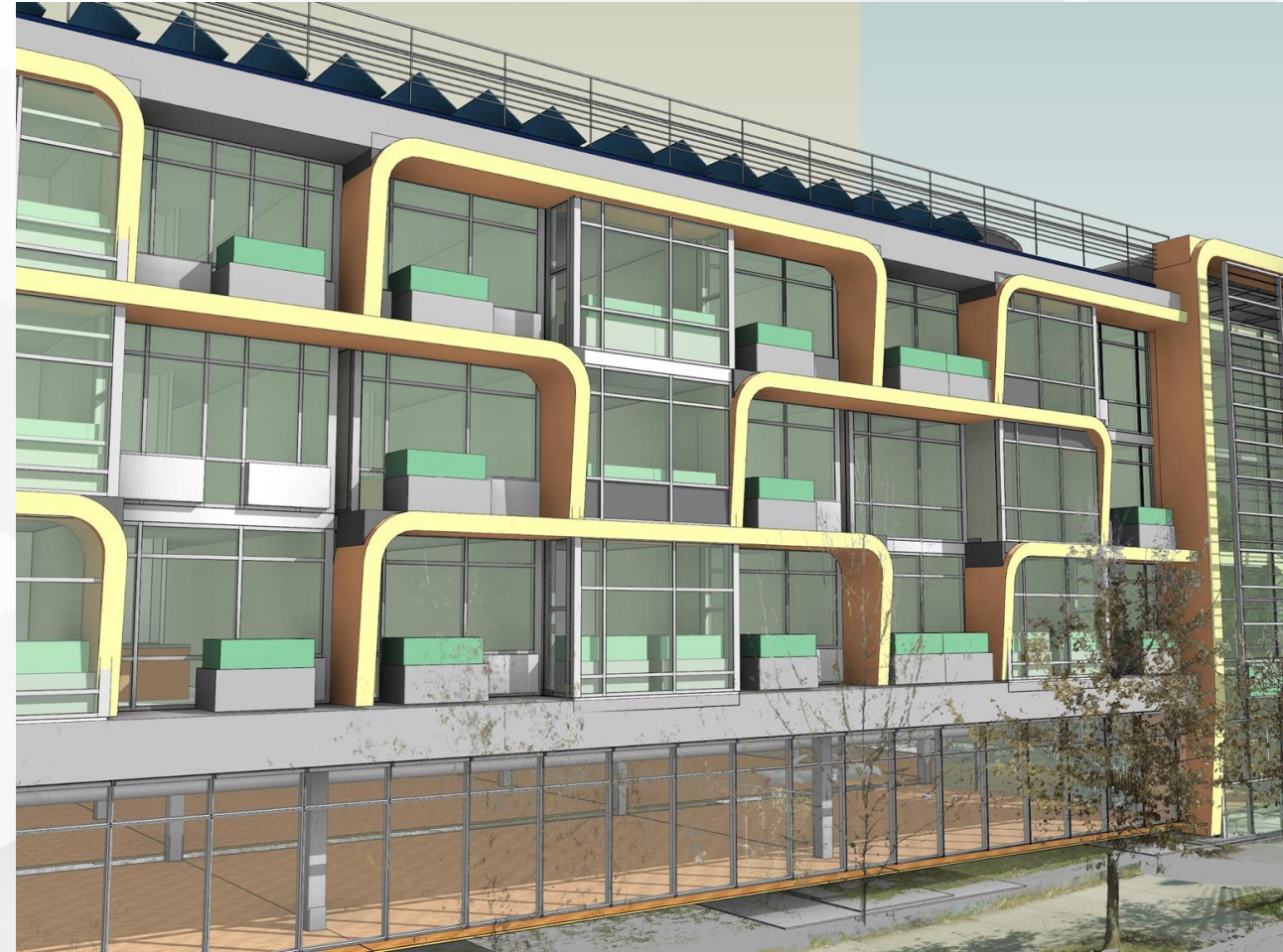
Site Logistics

Quantification/ Cost Estimation

Sequencing

Coordination

Operations Focus

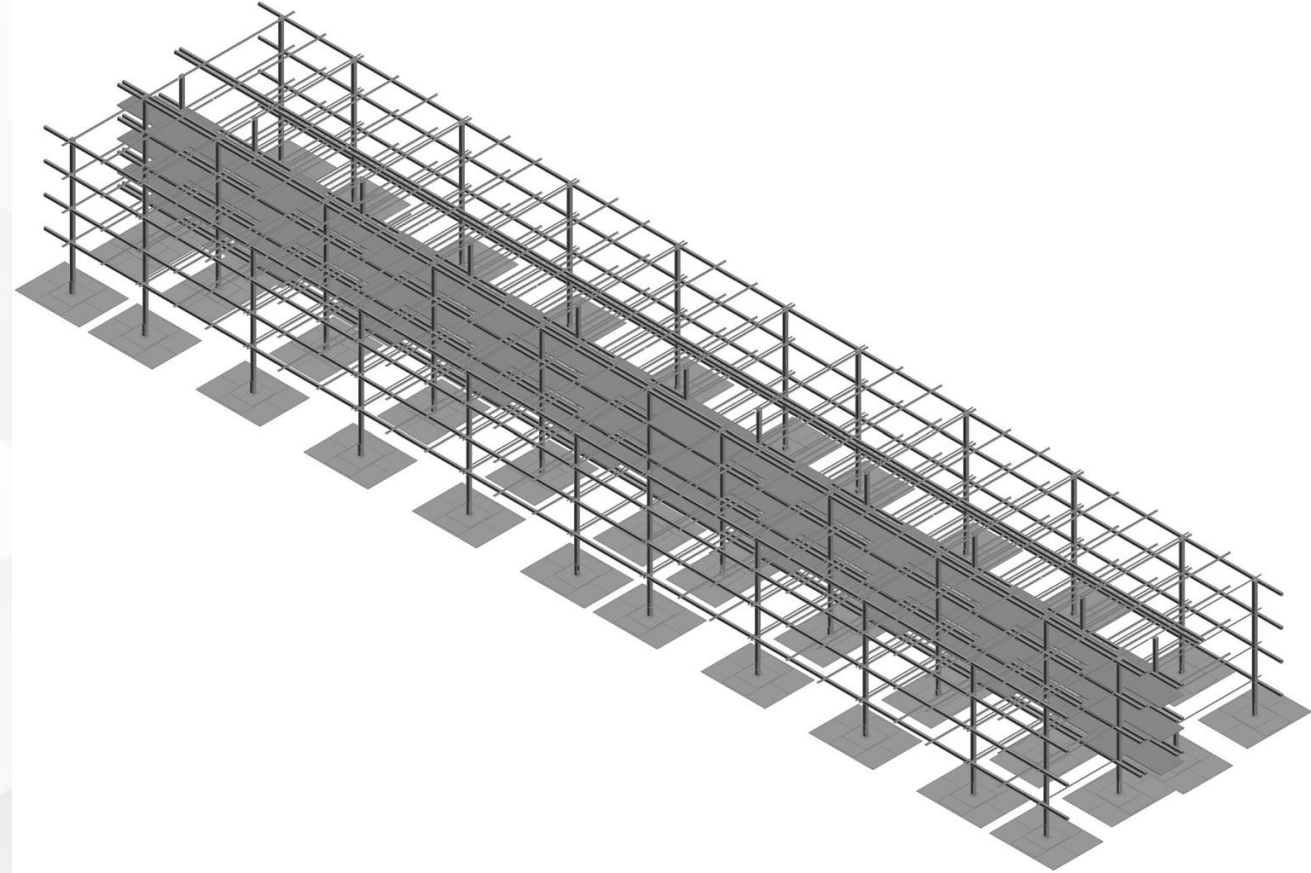


Means and Methods

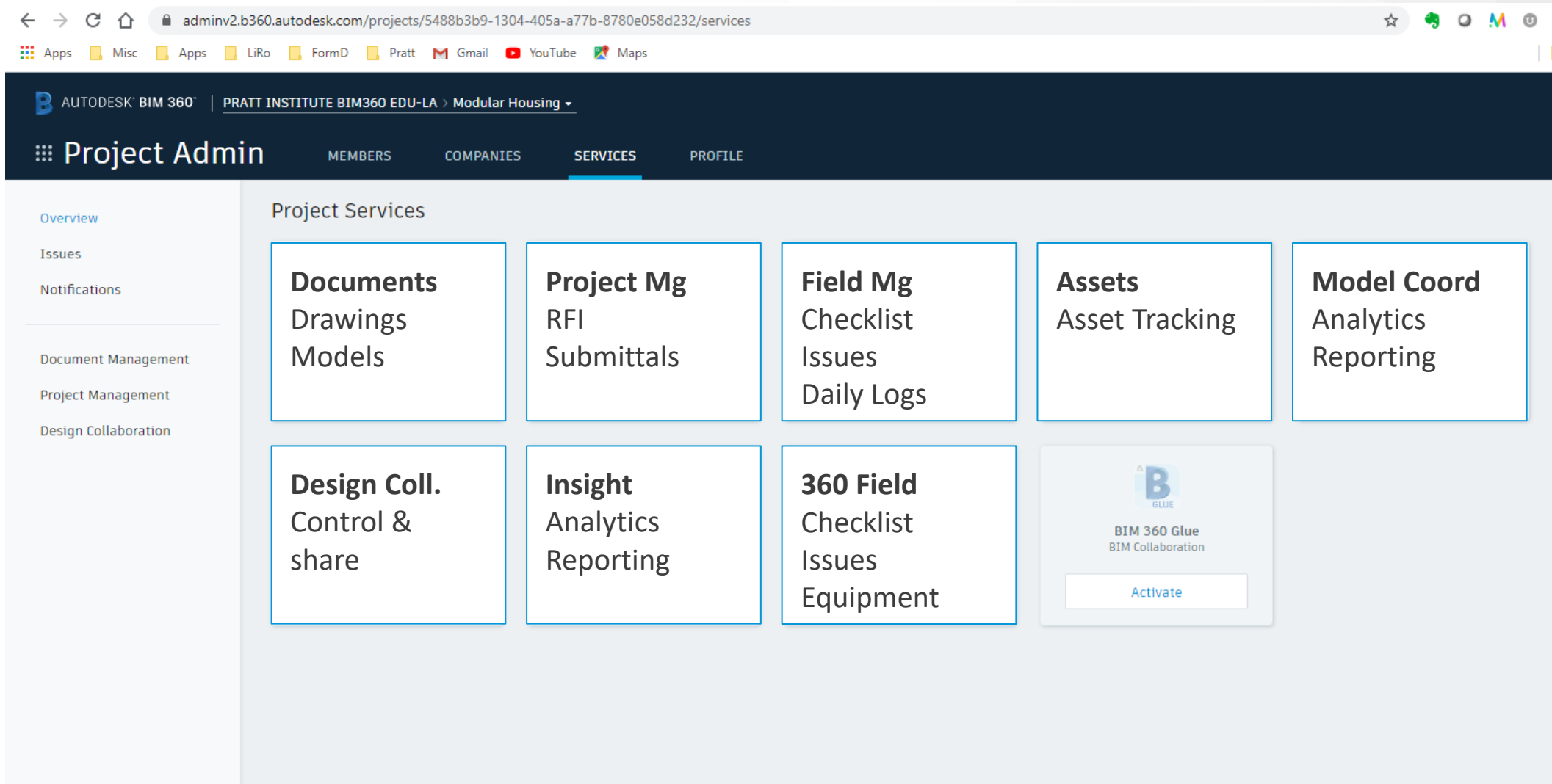
Sequencing

Scheduling

Virtual Mockups

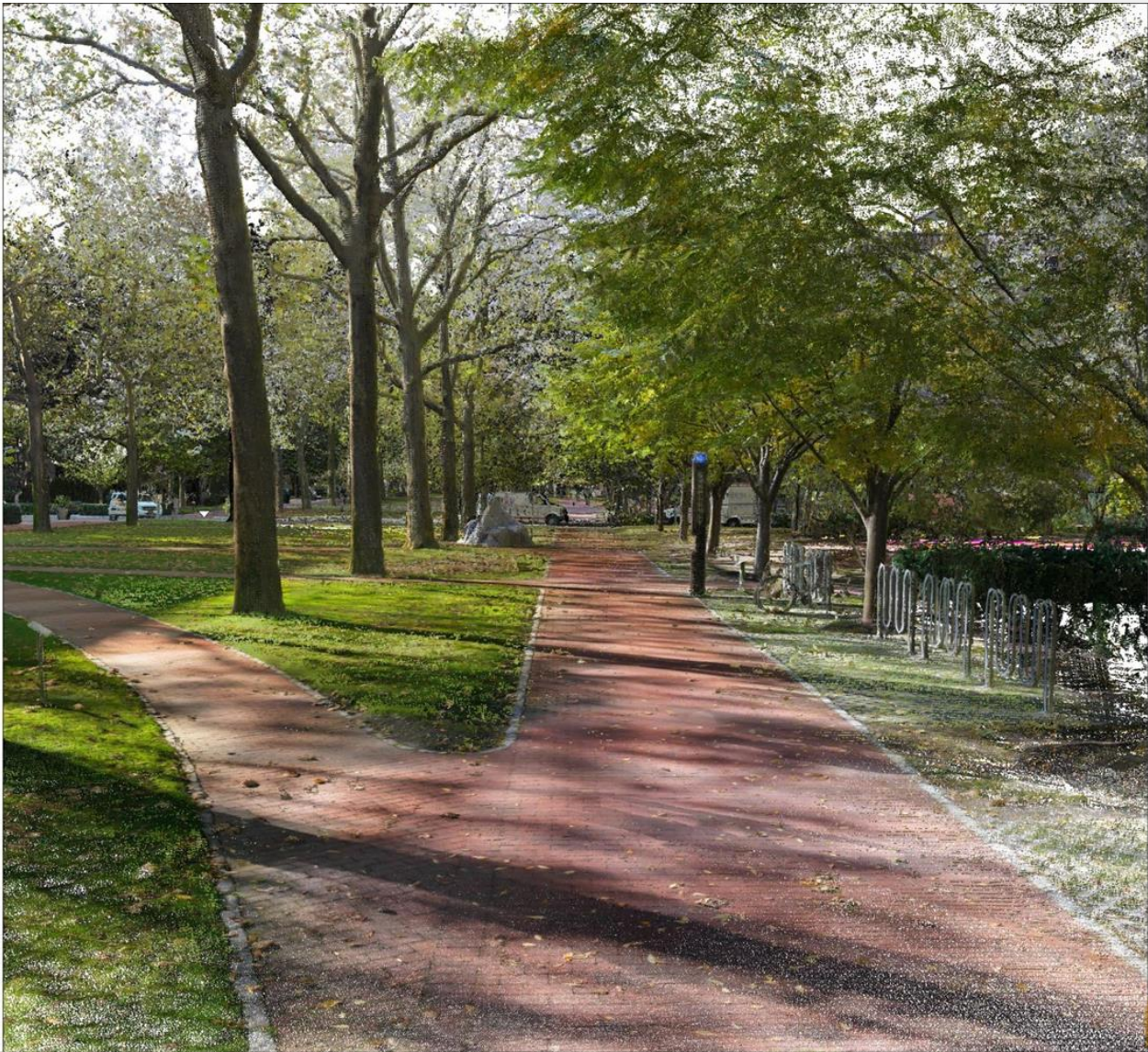


BIM 360



DIGITAL CAMPUS TWIN

1,000,000 SF BROOKLYN
CAMPUS PARK
CAPTURED IN **ONE DAY**



form

Pratt Institute

14th Street Campus

Areas

| Level | Area |
|------------|------|
| Not Placed | 0 SF |
| | 0 SF |

Assets

| Category | Count |
|-------------------|-------|
| 01 | |
| Plastic Materials | 28 |

REALITY

PERFORMANCE

SYSTEMS

VERTICALS

ASSETS

SPACES

Pratt

START

BD_00

DIGITAL BUILDING TWIN

CURRENT CONDITIONS DRAWINGS



FM BIM
SP/21

Myrtle and Grand
Brooklyn, NY 11205

Revision #: Date:

CD

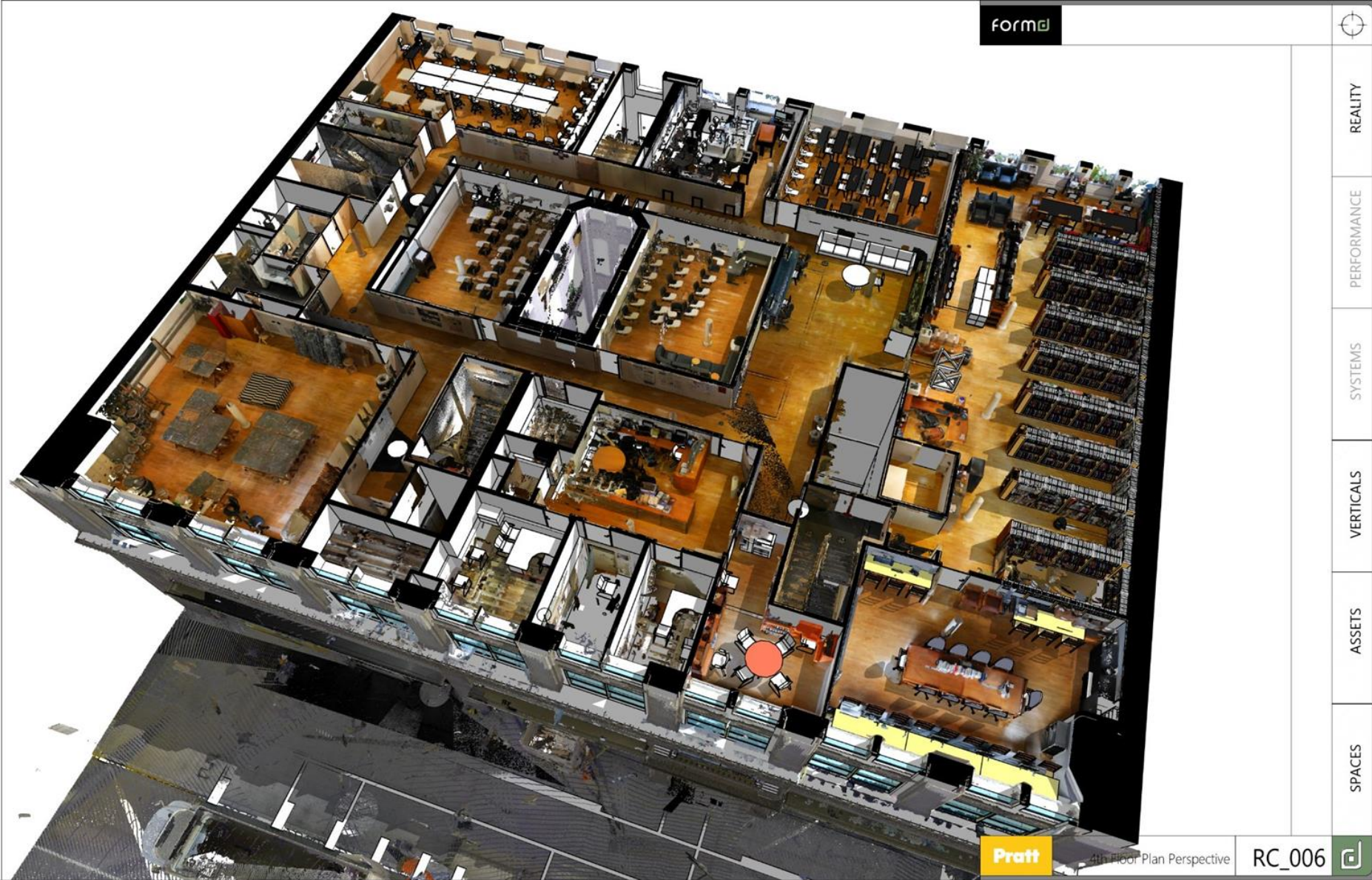
Scale: 1/16" = 1'-0"
Date: 10/17/20
Project No: ###-##
Drawn by: Author
Checked by: Checker

Drawing Title:
Unnamed

Drawing Number:
GL-004

DIGITAL BUILDING TWIN

REALITY CAPTURE



DIGITAL BUILDING TWIN

MODEL



Outcomes

Discussion about building in NYC

Community

Collaboration

Contracts/Specifications



AUTODESK[®]

Make anything[™]